

EDITORIAL

Are Carrots and Sticks for Donkeys, or for Doctors?

FOR MORE THAN A DECADE, health care has been advertised as a national crisis although the public seems to put it pretty far down the list of national problems. Be that as it may, Congress and the President both declared it to be a crisis and for nearly a decade there has been a flood of government-generated programs which were supposed to improve things. Some of these programs were quite massive and had effects upon health care which were certainly not anticipated. In their totality they have proven to be enormously expensive and appear not to have improved the nation's health or health care system commensurately. Much of what was started cannot be reversed. Health care planners, politicians, and of necessity doctors find themselves trying to work within a system which is developing serious internal frictions, lessened efficiency and higher costs. These problems seem to be compounded every time the planners and politicians try to tamper with the structure. There is a growing restiveness on the part of the health care professions and the health care industry.

Everyone is becoming frustrated. The government planners' plans are not working as expected. The government politicians find themselves getting deeper and deeper into something neither they nor their advisors seem to fully understand. Doctors find themselves trying to care for their patients amid a growing morass of often unnecessary and usually unworkable government regulations and constraints laid down by bureaucrats who have the authority, but unfortunately neither the knowledge nor the wisdom, to deal with the problems. To the frustrated planners and politicians, the entire health care system, and particularly the frustrated physicians who are its energizing force,

must seem balky if not indeed stubborn and intransigent. This appears to be the case if one judges by the government's decision to use the carrot-and-stick approach, as though the health care system and the people who must try to make it work are some kind of dumb brutes. They are not, of course, and for this reason this approach will not work, but the attempt will surely be costly.

It is not certain whether the carrot-and-stick strategem ever really worked very well, even with donkeys. However this may be, this dumb-brute approach ignores the intelligence of a sophisticated, compassionate and generally dedicated health care profession. In fact, it is little short of insulting. Neither doctors, nor their patients, nor the health care system are likely to respond as might a donkey to the driver's whim expressed through the dangling of a never quite attainable carrot or to the prodding of a stick, no matter how vigorously applied. As intelligent human beings, they will always distrust incentives designed to fulfill someone else's purpose, and they will instinctively resist, resent and evade efforts to coerce and compel them to do another's bidding. The inevitable result will be a further increase of the friction within the health care system, a further loss in its efficiency, and yet higher costs. That this is true will eventually be discovered by the planners and politicians, but it now looks as though the cost of this discovery will be millions and perhaps billions of dollars to the taxpayer.

If the carrot-and-stick approach will not work, what will? It is suggested that what will work will have to be something which takes full advantage of the intelligence, knowledge, training and human compassion of the practicing doctor, and his very fundamental dedication to the betterment of

health and health care; and this includes a genuine concern with the fiscal aspects, if these can be shown to affect patient care adversely. This means that doctors and their professional organizations should be an integral part of the process of defining the problem and deciding what to do about it, and then be a part of the solution. The record clearly shows that when physicians and other health professionals become convinced (1) that a health problem exists, and (2) that the knowledge to do something about it is available, they soon become strong advocates of whatever must be done to solve the problem. But conversely, when they are not sure either of the diagnosis or of the treatment, they temporize, the cardinal rule then being to do no harm. There is room for this attitude and this approach in the government's effort to deal with the present health care crisis.

The medical profession has long since passed the horse-and-buggy stage. Carrots and sticks are for donkeys, not for doctors. If the problems of the health care system are to be solved, the friction within the system should be reduced, not increased; and the efficiency of the system should be improved, not reduced. There is much to be learned about how to do this better.

—MSMW

Death from Ischemia

DEATH HAS NOT BEEN a popular subject for research—perhaps, in part, for psychological reasons. There may be a feeling that the step from life to death cannot be measured in the laboratory, or assessed in terms of standard deviations and p values. And perhaps there is a sense of inevitability about death that seems to preclude intervention and therefore discourages investigation. Certainly it is too complex a subject to be approached, at present, with the techniques of the molecular biologist. Yet there is reason to believe that this is an area in which further knowledge will provide a direct feedback for improved clinical care.

In the progression of changes involved in dying, the most interesting is the event that determines the "point of no return," for it is this that

defines the instant of death and constitutes the prime target for therapeutic intervention. This first, irreversible step will be quite different depending upon whether one is considering the whole organism or a single cell, the organism being much more vulnerable because of the functional interdependence of its parts. Consider, for example, circulatory arrest. Without intervention, death becomes inevitable after about 30 seconds due to loss of function of the respiratory center. After another 2 minutes or so, a second, normally irreversible, event occurs—loss of myocardial function. If these first two functional failures are circumvented by therapeutic intervention, a third can be revealed—impaired perfusion of peripheral organs, probably appearing first in the brain. This is due in part to loss of normal neurogenic maintenance of arterial pressure,¹ but also to stasis-induced changes in the vasculature and its contents. This latter phenomenon is the subject of a review by Dr. Rex Jamison which appears elsewhere in this issue of THE WESTERN JOURNAL OF MEDICINE. A fourth change which may limit the reversibility of circulatory arrest, *in vivo*, is the alteration in the composition of the blood as a result of its exchange with ischemic cells.

It seems clear that all four of the above changes must be controlled before one can well examine the tolerance to ischemia of the cells themselves. One approach is to study the cellular response to ischemia *in vitro* (a study of the effect on the mammalian retina² is an example) but as yet virtually nothing is known about the nature of the first irreversible change at the cellular level. The overall problem appears to be layered, like an onion, with the successive critical events revealed only by demonstrating that their prevention will extend survival. Such studies seem eminently worth while. Jamison's review indicates their potential importance at the organ level, and there is already one example of a therapeutic resurrection at the cellular level.³ Thus the study of death may have considerable significance for the maintenance of life.

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